

AMENDMENTS TO THE SPECIFICATION

Please enter the enclosed sequence listing into the above-referenced application.

Please amend the paragraph beginning on line 3 of page 29 to read as follows:

The smallest capsid gene, VP4, was cloned first using EcoRV and BglII to produce pLCVP4. The VP4 structural (VP4s) gene was cloned using RT-PCR. TP13 (SEQ ID NO. 13) and TP14 (SEQ ID NO. 14) are the primers and the EV1 RNA genome is the template. The VP4s contains a unique Eco RI restriction site that was maintained. By keeping the native Eco RI restriction site a serine residue is added onto the carboxyl terminal of the VP4 protein. The original T7/lac and p10 operators present in the pTriEx-1.1 vector drive VP4 gene expression. VP4 is a unique opportunity because of the possibility of forming chimeric molecules with the target protein in the carboxyl terminal half of VP4. This helps in subcloning because it eliminates the necessary removal of target gene stop codons and thus creates an opportunity for the insertion of multiple target genes simultaneously. A unique Avr I restriction site was introduced into the VP4s to allow for creating chimeric molecules with a linker region that starts at VP4₅₁. The Avr I restriction site modifies the native VP4s sequence by introducing silent mutations. The silent mutations alter the native nucleic acid sequence (CCT GGT) to (CCC GGG) but will not change the protein composition (Pro Gly). The recombinant VP4s was cloned into the pTriEx-1.1 vector using the Eco RV and Bgl II unique restriction sites. By cloning into the Eco RV restriction site we pick up the initiator methionine (M), alanine (A) and serine (S). This will mutate the native VP4 amino terminal sequence MGAQ (SEQ ID No. 30) to MAIS (SEQ ID No. 31). The VP4s cloning task was completed by DNA sequencing to insure proper nucleotide incorporation and that

the gene was cloned in frame with the initial ATG translation start sequence as shown in Figure 8.

The VP4s encodes for a protein with a predicted molecular weight of 6800 Da.